2

PAGE: 1

RAW SEQUENCE LISTING

DATE: 11/16/1999 TIME: 13:16:37

PATENT APPLICATION US/09/433,360 TIME:

Input Set: I433360.RAW

This Raw Listing contains the General Information Section and up to first 5 pages.

```
<110> APPLICANT: Khoja, Hamiduddin
 1
 2
           Shyamala, Venkatakrishna
 3
     <120> TITLE OF INVENTION: Isolated VSHK-1 Receptor Polypeptides
 4
           and Methods of Use Thereof
     <130> FILE REFERENCE: 2300-1544
 5
     <140> CURRENT APPLICATION NUMBER: US/09/433,360
 6
 7
     <141> CURRENT FILING DATE: 1999-11-03
     <150> EARLIER APPLICATION NUMBER: 60/107,112
 8
 9
     <151> EARLIER FILING DATE: 1998-11-04
10 -
     <150> EARLIER APPLICATION NUMBER: 60/114,856
     <151> EARLIER FILING DATE: 1999-01-06
11
     <160> NUMBER OF SEQ ID NOS: 14
12
13
     <170> SOFTWARE: FastSEQ for Windows Version 4.0
14
     <210> SEQ ID NO 1
15
     <211> LENGTH: 1958
     <212> TYPE: DNA
16
     <213> ORGANISM: Homo sapiens
17
18
     <400> SEQUENCE: 1
19
           aaaagtagct ggagttaggt catttgattt tatactctgt actcaagact gctcctctct
                                                                                    60
20
           gccgactaca acagattgga gccatggctt tggagcagaa ccaqtcaaca gattattatt
                                                                                   120
21
           atgaggaaaa tgaaatgaat ggcacttatg actacagtca atatgaactg atctgtatca
                                                                                   180
22
           aagaagatgt cagagaattt gcaaaagttt tcctccctgt attcctcaca atagttttcg
                                                                                   240
23
           tcattggact tgcaggcaat tccatggtag tggcaattta tgcctattac aagaaacaga
                                                                                   300
24
           gaaccaaaac agatgtgtac atcctgaatt tggctgtagc agatttactc cttctattca
                                                                                   360
25
           ctctgccttt ttgggctgtt aatgcagttc atgggtgggt tttagggaaa ataatgtgca
                                                                                   420
           aaataacttc agccttgtac acactaaact ttgtctctgg aatgcagttt ctggcttgta
26
                                                                                   480
27
           tcagcataga cagatatgtg gcagtaacta aagtccccag ccaatcagga gtgggaaaac
                                                                                   540
28
           catgctggat catctgtttc tgtgtctgga tggctgccat cttgctgagc ataccccagc
                                                                                   600
29
           tggtttttta tacagtaaat gacaatgcta ggtgcattcc cattttcccc cgctacctag
                                                                                   660
30
           gaacatcaat gaaagcattg attcaaatgc tagagatctg cattggattt gtagtaccct
                                                                                   720
31
           ttottattat gggggtgtgc tactttatca cagcaaggac actcatgaag atgccaaaca
                                                                                   780
32
           ttaaaatatc tcgaccccta aaagttctgc tcacagtcgt tatagttttc attgtcactc
                                                                                   840
33
           aactgcctta taacattgtc aagttctgcc gagccataga catcatctac tccctgatca
                                                                                   900
34
           ccagctgcaa catgagcaaa cgcatggaca tcgccatcca agtcacagaa agcatcgcac
                                                                                   960
35
           tettteacag etgeeteaae ecaateettt atgtttttat gggageatet tteaaaaaet
                                                                                  1020
36
           acgttatgaa agtggccaag aaatatgggt cctggagaag acagagacaa agtgtggagg
                                                                                  1080
37
           agttteettt tgattetgag ggteetaeag ageeaaceag taettttage atttaaaggt
                                                                                  1140
38
           aaaactgctc tgccttttgc ttggatacat atgaatgatg ctttcccctc aaataaaaca
                                                                                  1200
39
           tctgcattat tctgaaactc aaatctcaga cgccgtggtt gcaacttata ataaagaatg
                                                                                  1260
40
           ggttggggga agggggagaa ataaaagcca agaagaggaa acaagataat aaatgtacaa
                                                                                  1320
41
           aacatgaaaa ttaaaatgaa caatatagga aaataattgt aacaggcata agtgaataac
                                                                                  1380
42
           actictgctgt aacgaagaag agctttgtgg tgataatttt gtaticttggt tgcagtggtg
                                                                                  1440
43
           cttatacaaa tctacacaag tgataaaatg acacagaact atatacacac attgtaccaa
                                                                                  1500
44
           tttcaatttc ctggttttga cattatagta taattatgta agatggaacc attggggaaa
                                                                                  1560
```

PAGE: 2 RAW SEQUENCE LISTING DATE: 11/16/1999

PATENT APPLICATION US/09/433,360 TIME: 13:16:37

Input Set: I433360.RAW

45				_						_			_				atttat	1620
46								_					_		-		ccatct	1680
47		3 33 3 3												1740				
48														1800				
49														1860				
50														1920				
51															1958			
52	<210>	SEQ ID NO 2																
53	<211>	LEN	GTH:	350														
54	<212>	TYP	E: P	RT														
55	<213>	ORGANISM: Homo sapiens																
56	<400>	SEQUENCE: 2																
57		Met	Ala	Leu	Glu	Gln	Asn	Gln	Ser	Thr	Asp	Tyr	Tyr	Tyr	Glu	Glu	Asn	
58		1				5					10					15		
59		Glu	Met	Asn	Gly	Thr	Tyr	Asp	Tyr	Ser	Gln	Tyr	Glu	Leu	Ile	Cys	Ile	
60					20					25					30			
61		Lys	Glu	Asp	Val	Arg	Glu	Phe	Ala	Lys	Val	Phe	Leu	Pro	Val	Phe	Leu	
62				35					40					45				
63		Thr	Ile	Val	Phe	Val	Ile	Gly	Leu	Ala	Gly	Asn	Ser	Met	Val	Val	Ala	
64			50					55					60					
65		Ile	Tyr	Ala	Tyr	Tyr	Lys	Lys	Gln	Arg	Thr	Lys	Thr	Asp	Val	Tyr	Ile	
66		65					70					75					80	
67		Leu	Asn	Leu	Ala	Val	Ala	Asp	Leu	Leu	Leu	Leu	Phe	Thr	Leu	Pro	Phe	
68						85					90					95		
69		Trp	Ala	Val	Asn	Ala	Val	His	Gly	Trp	Val	Leu	Gly	Lys	Ile	Met	Cys	
70					100					105					110			
71		Lys	Ile	Thr	Ser	Ala	Leu	Tyr	Thr	Leu	Asn	Phe	Val	Ser	Gly	Met	Gln	
72				115					120					125				
73		Phe	Leu	Ala	Cys	Ile	Ser	Ile	Asp	Arg	Tyr	Val	Ala	Val	Thr	Lys	Val	
74			130					135					140					
75		Pro	Ser	Gln	Ser	Gly	Val	Gly	Lys	Pro	Cys	Trp	Ile	Ile	Cys	Phe	Cys	
76		145					150					155					160	
77		Val	Trp	Met	Ala	Ala	Ile	Leu	Leu	Ser	Ile	Pro	${\tt Gln}$	Leu	Val	Phe	Tyr	
78						165					170					175		
79		Thr	Val	Asn	Asp	Asn	Ala	Arg	Cys	Ile	Pro	Ile	Phe	Pro	Arg	Tyr	Leu	
80					180					185					190			
81		Gly	Thr	Ser	Met	Lys	Ala	Leu	Ile	Gln	Met	Leu	Glu	Ile	Cys	Ile	Gly	
82				195					200					205				
83		Phe	Val	Val	Pro	Phe	Leu	Ile	Met	Gly	Val	Cys	Tyr	Phe	Ile	Thr	Ala	
84			210					215					220					
85		Arg	Thr	Leu	Met	Lys	Met	Pro	Asn	Ile	Lys	Ile	Ser	Arg	Pro	Leu	Lys	
86		225					230					235					240	
87		Val	Leu	Leu	Thr	Val	Val	Ile	Val	Phe	Ile	Val	Thr	Gln	Leu	Pro	Tyr	
88						245					250					255		
89		Asn	Ile	Val	Lys	Phe	Cys	Arg	Ala	Ile	Asp	Ile	Ile	Tyr	Ser	Leu	Ile	
90					260		•	-		265	_				270			
91		Thr	Ser	Cys	Asn	Met	Ser	Lys	Arg	Met	Asp	Ile	Ala	Ile	Gln	Val	Thr	
92				275					280					285				
93		Glu	Ser	Ile	Ala	Leu	Phe	His	Ser	Cys	Leu	Asn	Pro	Ile	Leu	Tyr	Val	
94			290					295					300					

PAGE: 3

RAW SEQUENCE LISTING
PATENT APPLICATION US/09/433,360

Input Set: I433360.RAW

```
95
           Phe Met Gly Ala Ser Phe Lys Asn Tyr Val Met Lys Val Ala Lys Lys
 96
           305
                               310
                                                  315
 97
           Tyr Gly Ser Trp Arg Arg Gln Arg Gln Ser Val Glu Glu Phe Pro Phe
 98
                           325
                                              330
 99
           Asp Ser Glu Gly Pro Thr Glu Pro Thr Ser Thr Phe Ser Ile
100
                                          345
      <210> SEQ ID NO 3
101
102
      <211> LENGTH: 23
103
      <212> TYPE: DNA
      <213> ORGANISM: Homo sapiens
104
105
      <400> SEQUENCE: 3
106
           actaccaaca ggttggtact tta
                                                                               23
107
      <210> SEQ ID NO 4
108
      <211> LENGTH: 22
      <212> TYPE: DNA
109
      <213> ORGANISM: Homo sapiens
110
111
      <400> SEQUENCE: 4
112
           ctttgccatc tagagtggag cc
                                                                               22
113
      <210> SEQ ID NO 5
     <211> LENGTH: 82
114
115
     <212> TYPE: DNA
     <213> ORGANISM: Artificial Sequence
116
117
     <220> FEATURE:
      <221> NAME/KEY: misc feature
118
      <222> LOCATION: (1)...(82)
119
     <223> OTHER INFORMATION: n = A, T, C or G
120
     <223> OTHER INFORMATION: encodes synthetic peptide
121
122
      <400> SEQUENCE: 5
123
           60
124
           nsnnsccgcc tccacctcca cc
                                                                               82
125
     <210> SEQ ID NO 6
     <211> LENGTH: 93
126
127
     <212> TYPE: DNA
128
     <213> ORGANISM: Artificial Sequence
     <220> FEATURE:
129
130
     <221> NAME/KEY: misc feature
131
     <222> LOCATION: (1)...(93)
132
     <223> OTHER INFORMATION: n = inosine
     <223> OTHER INFORMATION: encodes synthetic peptide
133
     <400> SEQUENCE: 6
134
                                                                               60
           nnnnnnttca gcggagtgag aatagaaagg tac
                                                                               93
137
     <210> SEQ ID NO 7
138
     <211> LENGTH: 36
139
     <212> TYPE: DNA
140
     <213> ORGANISM: Artificial Sequence
141
     <220> FEATURE:
142
     <223> OTHER INFORMATION: primer
143
     <400> SEQUENCE: 7
144
           gctgcccgag agatctgtat atatgagtaa acttgg
                                                                               36
```

DATE: 11/16/1999 TIME: 13:16:37 PAGE: 4

RAW SEQUENCE LISTING
PATENT APPLICATION US/09/433,360

Input Set: I433360.RAW

145	<210>	SEQ ID NO 8	
146	<211>	LENGTH: 36	
147	<212>	TYPE: DNA	
148	<213>	ORGANISM: Artificial Sequence	
149		FEATURE:	
150		OTHER INFORMATION: primer	
151	<400>	SEQUENCE: 8	
152		gcaggctcgg gaattcggga aatgtgcgcg gaaccc	36
153		SEQ ID NO 9	
154		LENGTH: 21	
155		TYPE: DNA	
156		ORGANISM: Artificial Sequence	
157		FEATURE:	
158		OTHER INFORMATION: mutagenic oligonucleotides	
159	<400>	SEQUENCE: 9	
160		aaacttcctc atgaaaaagt c	21
161		SEQ ID NO 10	
162		LENGTH: 25	
163		TYPE: DNA	
164		ORGANISM: Artificial Sequence	
165		FEATURE:	
166		OTHER INFORMATION: mutagenic oligonucleotides	
167	<400>	SEQUENCE: 10	
168		agaatagaaa ggtaccacta aagga	25
169		SEQ ID NO 11	
170		LENGTH: 39	
171		TYPE: DNA	
172		ORGANISM: Artificial Sequence	
173		FEATURE:	
174		OTHER INFORMATION: mutagenic oligonucleotides	
175	<400>	SEQUENCE: 11	2.0
176	-010-	tttagtggta cetttetatt eteactegge egaaactgt	39
177		SEQ ID NO 12 LENGTH: 24	
178 179			
180		TYPE: DNA	
		ORGANISM: Artificial Sequence	
181 182		FEATURE: OTHER INFORMATION: mutagenic oligonucleotides	
183		SEQUENCE: 12	
184	<400>	aaagegeagt etetgaattt aeeg	24
185	-210-	SEQ ID NO 13	24
186		LENGTH: 22	
187		TYPE: DNA	
188		ORGANISM: Artificial Sequence	
189		FEATURE:	
190		OTHER INFORMATION: primers	
191		SEQUENCE: 13	
192	\ - 3007	tcgaaagcaa gctgataaac cg	22
193	<210>	SEQ ID NO 14	~~
194		LENGTH: 23	

OIPE

PAGE: 5 RAW SEQUENCE LISTING DATE: 11/16/1999

PATENT APPLICATION US/09/433,360 TIME: 13:16:37

Input Set: I433360.RAW

195 <212> TYPE: DNA

196 <213> ORGANISM: Artificial Sequence

197 <220> FEATURE:

198 <223> OTHER INFORMATION: primers

199 <400> SEQUENCE: 14

200 acagacagcc ctcatagtta gcg 23

PAGE: 6

VERIFICATION SUMMARY
PATENT APPLICATION US/09/433,360

DATE: 11/16/1999 TIME: 13:16:37

Input Set: **I433360.RAW**

Line	?	Err	or/W	Varning	3			Original Text						
	-						-							
123	W	"N"	or	"Xaa"	used:	Feature	required	ctttctattc	tcactccgct	gaannsnnsn	nsnnsnns			
124	W	"N"	or	"Xaa"	used:	Feature	required	nsnnsccgcc	tccacctcca	cc				
135	W	" N "	or	"Xaa"	used:	Feature	required	ggccggtgga	ggtggaggcg	${\tt gnnnnnnnn}$	${\tt nnnnnnn}$			
136	W	"N"	or	"Xaa"	used:	Feature	required	nnnnnnttca	gcggagtgag	aatagaaagg	tac			